

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200  
9506939.m -----MDVSLCPAKCSFWRIFLLGSVMDYVGSVLACPAACVCSKTEINRRDDGNLFPLLEQDSGNSGNSASINITDISRNITSTHIEHMRSLHTNAVDMELYTGLQKLTIKNSGLRITOPRAFKNPHRYINLSSNRLTTLQOLQSLRELRLQENFNCSQIRLMOLQEQGEARHDSOSLYCISADG  
33413412.m -----MDVSLCPAKCSFWRIFLLGSVMDYVGSVLACPAACVCSKTEINRRDDGNLFPLLEQDSGNSGNSASINITDISRNITSTHIEHMRSLHTNAVDMELYTGLQKLTIKNSGLRITOPRAFKNPHRYINLSSNRLTTLQOLQSLRELRLQENFNCSQIRLMOLQEQGEARHDSOSLYCISADG  
TRKC.h -----MDVSLCPAKCSFWRIFLLGSVMDYVGSVLACPAACVCSKTEINRRDDGNLFPLLEQDSGNSGNSASINITDISRNITSTHIEHMRSLHTNAVDMELYTGLQKLTIKNSGLRITOPRAFKNPHRYINLSSNRLTTLQOLQSLRELRLQENFNCSQIRLMOLQEQGEARHDSOSLYCISADG  
6981294.m -----MSPFWRHGHGAMARLWGFCLLVVGFWRRAAFACPTCKCSASRHWQSDPSPGIVAFPRPEPNSID -----PENITTEIFIANQKRLEIHNEDVYAYVGLKRLITVDGSLKRVAYRAFLKNSNLOHITNTRNRLSLSRKHFRRLDISELITLVGNPFTCSQIDMVKITLQBAK--SSPDTQDLYGHNSS  
TRKB.h -----MSPFWRHGHGAMARLWGFCLLVVGFWRRAAFACPTCKCSASRHWQSDPSPGIVAFPRPEPNSVD -----PENITTEIFIANQKRLEIHNEDVYAYVGLKRLITVDGSLKRVAYRAFLKNSNLOHITNTRNRLSLSRKHFRRLDISELITLVGNPFTCSQIDMVKITLQBAK--SSPDTQDLYGHNSS  
11024666.m MLRGQRHGQGWHRPAAGLGGVLTSLMLACACASCRETCVPGVSGRCHRAAGTLNTRLGRG -----AGNLTSLYVENORDLQREFEDLQGLGELRSLITIVKSGLRVAPDAFHTFRSHLNLSNABESLSKTVQGLSLQDLTSLGNPHCSQALFLQR EQDLCCGVYTKLQDSSGSD  
28491899.m MLRGQRHGQGWHRPAAGLGGVLTSLMLACACASCRETCVPGVSGRCHRAAGTLNTRLGRG -----AGNLTSLYVENOQHLQREFEDLQGLGELRSLITIVKSGLRVAPDAFHTFRSHLNLSNABESLSKTVQGLSLQDLTSLGNPHCSQALFLQR EQDLCCGVYTKLQDSSGSD  
TRKA.h MLRGQRHGQGWHRPAAGLGGVLTSLMLACACASCRETCVPGVSGRCHRAAGTLNTRLGRG -----AGNLTSLYVENOQHLQREFEDLQGLGELRSLITIVKSGLRVAPDAFHTFRSHLNLSNABESLSKTVQGLSLQDLTSLGNPHCSQALFLQR EQDLCCGVYTKLQDSSGSD  
11uf\_A -----LAHMPN--ASCQVPTLKVQVFNASVDVDDVLRRCQVRCRGLBOAGLLTSLQESATVVMKSGGLP -----SLGLLAVNTSDLNKKNVTCMAENDVGRAEVSVGVNVEFFASVGLTAVEMHHCIFEFVDCQAPASLRWLFNCSVLNETSFFITETRESPAAN ETVREGCRLRNOPTHVNNGYTLIAANFYCGAAS  
1ir3\_A -----LAHMPN--ASCQVPTLKVQVFNASVDVDDVLRRCQVRCRGLBOAGLLTSLQESATVVMKSGGLP -----SLGLLAVNTSDLNKKNVTCMAENDVGRAEVSVGVNVEFFASVGLTAVEMHHCIFEFVDCQAPASLRWLFNCSVLNETSFFITETRESPAAN ETVREGCRLRNOPTHVNNGYTLIAANFYCGAAS

210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400  
9506939.m SLPFRFRNISOCDPEPESHVHNTVREGDNAVITNGSGSHLPDVTIVTLOSINTEONLNWNVNVAIINLNVNVTSENGFTLTCIAENVVCMNSASVALTVVPPRVVSLVEPEVRLIECFEFVVRGNPTPLHNGOPLRESKILHMDVYQ ---EGEVS-ECCLLENKRTHEVNNGYTLIAKNALGTANQI  
33413412.m SLPFRFRNISOCDPEPESHVHNTVREGDNAVITNGSGSHLPDVTIVTLOSINTEONLNWNVNVAIINLNVNVTSENGFTLTCIAENVVCMNSASVALTVVPPRVVSLVEPEVRLIECFEFVVRGNPTPLHNGOPLRESKILHMDVYQ ---EGEVS-ECCLLENKRTHEVNNGYTLIAKNALGTANQI  
TRKC.h SLPFRFRNISOCDPEPESHVHNTVREGDNAVITNGSGSHLPDVTIVTLOSINTEONLNWNVNVAIINLNVNVTSENGFTLTCIAENVVCMNSASVALTVVPPRVVSLVEPEVRLIECFEFVVRGNPTPLHNGOPLRESKILHMDVYQ ---EGEVS-ECCLLENKRTHEVNNGYTLIAKNALGTANQI  
6981294.m KNTPANLQIFNCPSPANAAANNTVBEKSKITISCSVAQDRAVNMVYDGNVYKHMNEPSSHQQ ---SLRHNISSDSCKKISQVAENVVCGDDDSVNLTVFPAPTITLESPTSDDHHCIFEFVVRGNPTPLHNGOPLRESKILHMDVYQ ---EGEVS-ECCLLENKRTHEVNNGYTLIAKNALGTANQI  
TRKB.h KNTPANLQIFNCPSPANAAANNTVBEKSKITISCSVAQDRAVNMVYDGNVYKHMNEPSSHQQ ---SLRHNISSDSCKKISQVAENVVCGDDDSVNLTVFPAPTITLESPTSDDHHCIFEFVVRGNPTPLHNGOPLRESKILHMDVYQ ---EGEVS-ECCLLENKRTHEVNNGYTLIAKNALGTANQI  
11024666.m QFLPFGHN--NCSQVPSVKLQMFNDQSVVEGDDVFLCQVEGCLAQDAILTELEGATVTKKSSDLP -----SLGLLAVNTSDLNKKNVTCMAENDVGRAEVSVGVNVEFFASVGLKAVEQHHWCIFEFVDCQAPASLRWLFNCSVLNETSFFITETRESPAAN ETVREGCRLRNOPTHVNNGYTLIAANFYCGAAS  
28491899.m QFLPFGHN--TSCQVPTLKVQVFNASVDVDDVLRRCQVRCRGLBOAGLLTSLQESATVVMKSGGLP -----SLGLLAVNTSDLNKKNVTCMAENDVGRAEVSVGVNVEFFASVGLKAVEQHHWCIFEFVDCQAPASLRWLFNCSVLNETSFFITETRESPAAN ETVREGCRLRNOPTHVNNGYTLIAANFYCGAAS  
TRKA.h --LAHMPN--ASCQVPTLKVQVFNASVDVDDVLRRCQVRCRGLBOAGLLTSLQESATVVMKSGGLP -----SLGLLAVNTSDLNKKNVTCMAENDVGRAEVSVGVNVEFFASVGLTAVEMHHCIFEFVDCQAPASLRWLFNCSVLNETSFFITETRESPAAN ETVREGCRLRNOPTHVNNGYTLIAANFYCGAAS  
11uf\_A -----LAHMPN--ASCQVPTLKVQVFNASVDVDDVLRRCQVRCRGLBOAGLLTSLQESATVVMKSGGLP -----SLGLLAVNTSDLNKKNVTCMAENDVGRAEVSVGVNVEFFASVGLTAVEMHHCIFEFVDCQAPASLRWLFNCSVLNETSFFITETRESPAAN ETVREGCRLRNOPTHVNNGYTLIAANFYCGAAS  
1ir3\_A -----LAHMPN--ASCQVPTLKVQVFNASVDVDDVLRRCQVRCRGLBOAGLLTSLQESATVVMKSGGLP -----SLGLLAVNTSDLNKKNVTCMAENDVGRAEVSVGVNVEFFASVGLTAVEMHHCIFEFVDCQAPASLRWLFNCSVLNETSFFITETRESPAAN ETVREGCRLRNOPTHVNNGYTLIAANFYCGAAS

410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600  
9506939.m INGHFLKEP -----FPBST -----DFDFESDASHTPPITVTRKEEDTFFGVSTAVGLAAFCVLLVLEIIMINKYGRRSKFKMGKGPVAVISGEEDSASPLHEHNGHITTESSLDAGPDIIVIGMTRIPVLENPQYFRQGHNCCHKPDTYVQHIKRRDVLKRELQEGAFQKVFLEACYNLSPTKDKMLVAVK  
33413412.m INGHFLKEP -----FPBST -----DFDFESDASHTPPITVTRKEEDTFFGVSTAVGLAAFCVLLVLEIIMINKYGRRSKFKMGKGPVAVISGEEDSASPLHEHNGHITTESSLDAGPDIIVIGMTRIPVLENPQYFRQGHNCCHKPDTYVQHIKRRDVLKRELQEGAFQKVFLEACYNLSPTKDKMLVAVK  
TRKC.h INGHFLKEP -----FPBST -----DNFILDVSSHPTPIITVTRKEEDTFFGVSTAVGLAAFCVLLVLEIIMINKYGRRSKFKMGKGPVAVISGEEDSASPLHEHNGHITTESSLDAGPDIIVIGMTRIPVLENPQYFRQGHNCCHKPDTYVQHIKRRDVLKRELQEGAFQKVFLEACYNLSPTKDKMLVAVK  
6981294.m ISABFMGRPGVDYENNYPEVLYEDDWTITDIDDTINKSNIEPSTVDADINREHLSYVAVWIASVVGCLVIMLILLKLRARSKFKMGKGPASVINDSDSASPLHEHNGHITTESSLDAGPDIIVIGMTRIPVLENPQYFRQGHNCCHKPDTYVQHIKRRDVLKRELQEGAFQKVFLEACYNLSPTKDKMLVAVK  
TRKB.h ISABFMGRPGVDYENNYPEVLYEDDWTITDIDDTINKSNIEPSTVDADINREHLSYVAVWIASVVGCLVIMLILLKLRARSKFKMGKGPASVINDSDSASPLHEHNGHITTESSLDAGPDIIVIGMTRIPVLENPQYFRQGHNCCHKPDTYVQHIKRRDVLKRELQEGAFQKVFLEACYNLSPTKDKMLVAVK  
11024666.m IMAAFMDNP -----FEFNPEDP -----IPVSFSPVDNISTSRDVEKRDTEFFGVSAVGLAAFCVLLVLEIIMINKYGRRSKFKMGKGPVAVISGEEDSASPLHEHNGHITTESSLDAGPDIIVIGMTRIPVLENPQYFRQGHNCCHKPDTYVQHIKRRDVLKRELQEGAFQKVFLEACYNLSPTKDKMLVAVK  
28491899.m IMAAFMDNP -----FEFNPEDP -----IPVSFSPVDNISTSRDVEKRDTEFFGVSAVGLAAFCVLLVLEIIMINKYGRRSKFKMGKGPVAVISGEEDSASPLHEHNGHITTESSLDAGPDIIVIGMTRIPVLENPQYFRQGHNCCHKPDTYVQHIKRRDVLKRELQEGAFQKVFLEACYNLSPTKDKMLVAVK  
TRKA.h IMAAFMDNP -----FEFNPEDP -----IPVSFSPVDNISTSRDVEKRDTEFFGVSAVGLAAFCVLLVLEIIMINKYGRRSKFKMGKGPVAVISGEEDSASPLHEHNGHITTESSLDAGPDIIVIGMTRIPVLENPQYFRQGHNCCHKPDTYVQHIKRRDVLKRELQEGAFQKVFLEACYNLSPTKDKMLVAVK  
11uf\_A -----LAHMPN--ASCQVPTLKVQVFNASVDVDDVLRRCQVRCRGLBOAGLLTSLQESATVVMKSGGLP -----SLGLLAVNTSDLNKKNVTCMAENDVGRAEVSVGVNVEFFASVGLTAVEMHHCIFEFVDCQAPASLRWLFNCSVLNETSFFITETRESPAAN ETVREGCRLRNOPTHVNNGYTLIAANFYCGAAS  
1ir3\_A -----LAHMPN--ASCQVPTLKVQVFNASVDVDDVLRRCQVRCRGLBOAGLLTSLQESATVVMKSGGLP -----SLGLLAVNTSDLNKKNVTCMAENDVGRAEVSVGVNVEFFASVGLTAVEMHHCIFEFVDCQAPASLRWLFNCSVLNETSFFITETRESPAAN ETVREGCRLRNOPTHVNNGYTLIAANFYCGAAS

610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800  
9506939.m ALKDFTLAARKDFQREAEILLNLOHEHIVKFGVCCGDDPLIMVFEYMKHGDLNKFLRAHGFDAMILVDGQPR -----CAKQELGLSOMLIIASQIASQMVYLASQHFVHRDLATRNCLVQANLLVKIIDFGMSRDVYSTDYRVGGHTMTPIRNPPESIMYRKFTTESDV SFGVVL EIFTYGKQF YQLSNT  
33413412.m ALKDFTLAARKDFQREAEILLNLOHEHIVKFGVCCGDDPLIMVFEYMKHGDLNKFLRAHGFDAMILVDGQPR -----CAKQELGLSOMLIIASQIASQMVYLASQHFVHRDLATRNCLVQANLLVKIIDFGMSRDVYSTDYRVGGHTMTPIRNPPESIMYRKFTTESDV SFGVVL EIFTYGKQF YQLSNT  
TRKC.h ALKDFTLAARKDFQREAEILLNLOHEHIVKFGVCCGDDPLIMVFEYMKHGDLNKFLRAHGFDAMILVDGQPR -----CAKQELGLSOMLIIASQIASQMVYLASQHFVHRDLATRNCLVQANLLVKIIDFGMSRDVYSTDYRVGGHTMTPIRNPPESIMYRKFTTESDV SFGVVL EIFTYGKQF YQLSNT  
6981294.m TLKDDASDNARKDFQREAEILLNLOHEHIVKFGVCCGDDPLIMVFEYMKHGDLNKFLRAHGFDAMILVDGQPR -----PTBETQSOMLIIAQIAAGMVYLASQHFVHRDLATRNCLVGENLLVKIIDFGMSRDVYSTDYRVGGHTMTPIRNPPESIMYRKFTTESDV SFGVVL EIFTYGKQF YQLSNN  
TRKB.h TLKDDASDNARKDFQREAEILLNLOHEHIVKFGVCCGDDPLIMVFEYMKHGDLNKFLRAHGFDAMILVDGQPR -----PTBETQSOMLIIAQIAAGMVYLASQHFVHRDLATRNCLVGENLLVKIIDFGMSRDVYSTDYRVGGHTMTPIRNPPESIMYRKFTTESDV SFGVVL EIFTYGKQF YQLSNN  
11024666.m ALKEAS ENARODFOREAEILLNLOHOHIVRFVFGVCEGDDPLIMVFEYMRHGDLNKFLRAHGFDAKLLAGGED -----VAPQELGLSOLLAVASQVAAQMVYLASQHFVHRDLATRNCLVQGLVVKIIDFGMSRDVYSTDYRVGGHTMTPIRNPPESILYRKFTTESDV SFGVVL EIFTYGKQF YQLSNT  
28491899.m ALKEAS ENARODFOREAEILLNLOHOHIVRFVFGVCEGDDPLIMVFEYMRHGDLNKFLRAHGFDAKLLAGGED -----VAPQELGLSOLLAVASQVAAQMVYLASQHFVHRDLATRNCLVQGLVVKIIDFGMSRDVYSTDYRVGGHTMTPIRNPPESILYRKFTTESDV SFGVVL EIFTYGKQF YQLSNT  
TRKA.h ALKEAS ENARODFOREAEILLNLOHOHIVRFVFGVCEGDDPLIMVFEYMRHGDLNKFLRAHGFDAKLLAGGED -----VAPQELGLSOLLAVASQVAAQMVYLASQHFVHRDLATRNCLVQGLVVKIIDFGMSRDVYSTDYRVGGHTMTPIRNPPESILYRKFTTESDV SFGVVL EIFTYGKQF YQLSNT  
11uf\_A MLKEASADQADFOREAEILLNLOHOHIVRFVFGVCEGDDPLIMVFEYMRHGDLNKFLRAHGFDAKLLAGGED -----VAPQELGLSOLLAVASQVAAQMVYLASQHFVHRDLATRNCLVQGLVVKIIDFGMSRDVYSTDYRVGGHTMTPIRNPPESILYRKFTTESDV SFGVVL EIFTYGKQF YQLSNT  
1ir3\_A TVNBSASLRREDFEENASVMKGFCTHVVRLVLLGVSKCQPTLVVMSMAHGDLSYLRLEAEANNGRPF -----PTEMLMAAEIADQAVYLNARKEVHRDLARNCMVARDFTVKIIDFGMTRDIXETPKXKGGKGLPVRMAPSSKQGVFTTSDM SFGVVL EIFTYGKQF YQLSNT

810 820 830 840 850 860  
9506939.m EVIECITQGRVLERPRVCEKVVVDVMLGC QREPOQRNIIKKEYIKLHALSKATPHYLDILG -----  
33413412.m EVIECITQGRVLERPRVCEKVVVDVMLGC QREPOQRNIIKKEYIKLHALSKATPHYLDILG -----  
TRKC.h EVIECITQGRVLERPRVCEKVVVDVMLGC QREPOQRNIIKKEYIKLHALSKATPHYLDILG -----  
6981294.m EVIECITQGRVLRQRPQCEQVYELMLGC QREPHTRRNKIKKHGILLONAKASPVYLDILG -----  
TRKB.h EVIECITQGRVLRQRPQCEQVYELMLGC QREPHTRRNKIKKHGILLONAKASPVYLDILG -----  
11024666.m EAIECITQGRLELRPRACPEVYVAMRGC QREPOQRISMKDVBHARLQALAAQAPSYLDVLC -----  
28491899.m EAIECITQGRLELRPRACPEVYVAMRGC QREPOQRISMKDVBHARLQALAAQAPSYLDVLC -----  
TRKA.h EAIECITQGRLELRPRACPEVYVAMRGC QREPOQRISMKDVBHARLQALAAQAPSYLDVLC -----  
11uf\_A EVIYVARDQNLACPENCPLEYNLMRIGCKLPAADRSHFCSHRLORQCRABGQVSY -----  
1ir3\_A QVLKFMVDGYYLDQDDNCPREVDMRMCQFNPKRTELEIVNLLKDDLHFSFPPVFFHSEENK